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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,715	11/21/2003	Hidemitsu Aoki	8017-1112	8854

466 7590 04/18/2005

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EXAMINER

MRUK, BRIAN P

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,715

Applicant(s)

AOKI ET AL.

Examiner

Brian P. Mruk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11-21-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, for containing the phrase "alkyl ether type of nonionic surfactant". The term "type" renders the claim vague and indefinite, since one of ordinary skill in the art would not be able to ascertain the metes and bounds of the term "type". Furthermore, the specification does not contain guidelines describing what numerical values are encompassed by the phrase "type". See *MPEP 2173.05 (b)*. Appropriate correction and/or clarification is required.
5. Claims 2-9 are rejected under 35 U.S.C. 112, second paragraph, for being dependent upon a claim with the above addressed 112 problem.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki et al, U.S. Patent No. 5,382,295.

Aoki et al, U.S. Patent No. 5,382,295, discloses a method for cleaning aluminum and aluminum alloys with a composition comprising 0.5-10 grams per liter of a builder, 0.5-10 grams per liter of a phosphonic acid compound, 0.1-3 grams per liter of a sequestering agent, and 0.5-5 grams per liter of a surfactant component (see abstract and col. 2, lines 25-56). It is further taught by Aoki et al that the phosphonic acid compound includes aminotrimethylenephosphonic acid, ethylenediaminetetramethylenephosphonic acid, and 1-hydroxyethylidene-1,1-diphosphonic acid (see col. 3, lines 4-35), and that suitable surfactants include ethoxylated primary alcohols (see col. 3, lines 36-46), per the requirements of the instant invention. Specifically, note Examples 1-7. Therefore, instant claims 1-5 and 7-9 are anticipated by Aoki et al, U.S. Patent No. 5,382,295.

8. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Satoshi et al, JP 2000-219900.

Satoshi et al, JP 2000-219900, discloses with sufficient specificity a liquid detergent composition comprising 5-70% by weight of an ethoxylated alcohol of formula 1, and 0.01-10% by weight of ethane-1-hydroxy-1,1-diphosphonic acid (see abstract), per the requirements of the instant invention. Specifically, note that the examples disclose detergent compositions that have a pH of 5, per the requirements of instant claim 6. Therefore, instant claims 1-6 are anticipated by Satoshi et al, JP 2000-219900.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bessho et al, U.S. Patent No. 6,440,856.

Bessho et al, U.S. Patent No. 6,440,856, discloses a cleaning agent and method for semiconductor parts comprising a sulfonic acid containing copolymer, a phosphonic acid containing copolymer, a phosphonic acid compound, and a surfactant (see abstract). It is further taught by Bessho et al that the phosphonic acid compound includes aminotrimethylenephosphonic acid, ethylenediaminetetramethylenephosphonic

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acid, and 1-hydroxyethylidene-1,1-diphosphonic acid (see col. 9, lines 34-60), that suitable surfactants include alkyl ethers of polyethylene glycol (see col. 10, lines 14-18), and that the pH of the cleaning agent includes pH values of 2 and 3 (see col. 11, lines 3-13), per the requirements of the instant invention.

Although Bessho et al generally discloses a cleaning agent containing a diphosphonic acid compound and an ethoxylated nonionic surfactant, the reference does not require such cleaning agents containing these components with sufficient specificity to constitute anticipation.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have formulated a cleaning agent, as taught by Bessho et al, which contained a diphosphonic acid compound and an ethoxylated nonionic surfactant, because such hair cleaning agents fall within the scope of those taught by Bessho et al. Therefore, one of ordinary skill in the art would have had a reasonable expectation of success, because such a cleaning agent for cleaning semiconductor parts containing both a diphosphonic acid compound and an ethoxylated nonionic surfactant is expressly suggested by the Bessho et al disclosure and therefore is an obvious formulation.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Mruk whose telephone number is (571) 272-1321. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta, can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

BPM

Brian Mruk
April 13, 2005

Brian P. Mruk

Brian P. Mruk
Primary Examiner
Tech Center 1700